

REMARKS

Status of the Claims

Pending claims

Claims 1 to 30 as filed are pending.

Claims added in the instant amendment

Claims 31 to 37 are added. Thus, after entry of the instant amendment, claims 1 to 37 will be pending.

Support for the Claim Amendments

The specification sets forth an extensive description of the invention in the new claims. Support for claims directed to method for producing alpha-substituted carboxylic acids can be found, *inter alia*, on page 2, lines 19 to 24. Support for claims directed to method for producing alpha-substituted carboxylic acids in a single reaction vessel can be found, *inter alia*, on page 1, lines 11 to 15.

The Restriction Requirement

The Patent Office has alleged that the pending claims of the application are directed to six separate and distinct inventions under 35 U.S.C. §121:

Group I: Claims 1-17 and 22-24, drawn to methods of making α -substituted carboxylic acids using nitrilases, classified in class 435, subclass 126.

Group II: Claims 18-21, drawn to α -substituted carboxylic acids, classified in class 562, subclass 557.

Group III: Claims 25 and 29, drawn to nitrilase polypeptides related to SEQ ID NO:2, classified in class 435, subclass 227.

Group IV: Claims 25 and 30, drawn to nitrilase polypeptides related to SEQ ID NO:4, classified in class 435, subclass 227.

Group V: Claims 26 and 27, drawn to nucleic acid sequences encoding nitrilase polypeptides related to SEQ ID NOS: 1 and 2, classified in class 536, subclass 23.2.

Group VI: Claims 26 and 28, drawn to nucleic acid sequences encoding nitrilase polypeptides related to SEQ ID NOS: 3 and 4, classified in class 536, subclass 23.2.

The Patent Office also alleged that the invention contains claims directed to patentably distinct species of the claimed invention. Species election must be made in the event either of Groups I or II are elected. The species of Group I, claims 1-17 and 22-24, drawn to methods of making α -substituted carboxylic acids using nitrilases, include several species relating to the carboxylic acid produced, the cyanide used, the ammonium salt used and the nitrilase used.

The Election

In response to the Restriction Requirement, Applicants elect Group I, claims 1 to 17, and 22 to 24, drawn to methods of making alpha-substituted carboxylic acids using nitrilases, with traverse.

Thus, after entry of the instant response, claims 1 to 17, 22 to 24 and 31 to 37 will be pending and under consideration.

In response to the species election, Applicants elect: for the carboxylic acid produced, 2-chloro mandelic acid; for the nitrilase used, the polypeptide as set forth in SEQ ID NO:4 (which, in one aspect, is encoded by an sequence as set forth in SEQ ID NO:3); for the cyanide used, KCN (see page 77, line 23 of the specification); for the ammonium salt, NH₄Cl (see page 77, line 24 of the specification).

When the elected species is held to be allowable, Applicants are entitled to consideration (examination) of additional species; if all species are held to be allowable, a generic claim should be allowed (MPEP §809.02(c); pg 800-50, 8th Edition, August 2001).

Reasons to reconsider and withdraw restriction requirement

Applicants respectfully request the Patent Office reconsider and withdraw the restriction requirement for the following reasons:

Group I is drawn to methods of making α -substituted carboxylic acids using nitrilases. Group II is drawn to α -substituted carboxylic acids.

Applicants respectfully aver that after a complete search directed to making α -substituted carboxylic acids, it would not be an undue burden for the Patent Office to also do a complete search for the corresponding product, or α -substituted carboxylic acids. Accordingly, Applicants respectfully request the Patent Office to rejoin all claims directed to methods of

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making α -substituted carboxylic acids and the corresponding products of the methods, or α -substituted carboxylic acids, into one restriction group.

Group I is drawn to methods of making α -substituted carboxylic acids using nitrilases. Groups III through VI are drawn to nitrilase polypeptides and nucleic acids which encode them (in one aspect, SEQ ID NOS:1 to 4).

Applicants respectfully aver that after a complete search directed to making α -substituted carboxylic acids using nitrilases, it would not be an undue burden for the Patent Office to also do a complete search for to nitrilase polypeptides and nucleic acids. Accordingly, Applicants respectfully request the Patent Office to rejoin all claims directed to methods of making α -substituted carboxylic acids using nitrilases and to nitrilase polypeptides and nucleic acids into one restriction group.

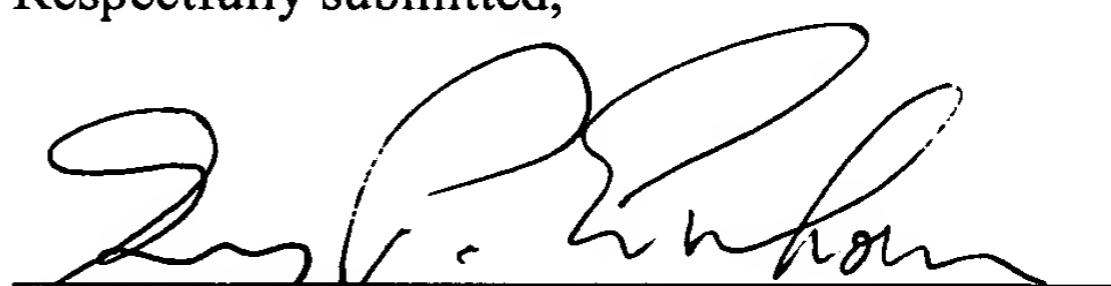
If an additional fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 06-1050. Please credit any overpayment to the above-noted Deposit Account.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 858 678 5070.

Respectfully submitted,

Date:

Jan. 16, 2003


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Version with markings to show changes made

In The Specification:

The pending title has been replaced with the following new title:

--METHODS FOR PRODUCING ALPHA-SUBSTITUTED CARBOXYLIC ACIDS--

In the claims:

Claim 31 to 37 have been added.